

intelligible figures than we have had of the early development of any one species of marine Bryozoa thus far. He has, however, not been able to decide positively the nature of the ova, said in one case to owe their origin to a sexual process, and in the other cases to point to the existence of parthenogenesis among Bryozoa under certain circumstances. Claparède has not confirmed the observations of Schneider on the development of *Membranipora*; but from what Nitzsche has observed of the early stages of *Bugula*, he appears to have seen the same retrograde development in the youngest stages of its larva which Schneider observed in *Cyphonantes* during its development into *Membranipora*.—*Silliman's American Journal*, May 1871.

*On the Order of Development of the Dentition of Sloths (Bradypus).*

By Dr. J. E. GRAY, F.R.S. &c.

The skull of the two-toed Sloth (*Choloepus*) is distinguished from that of the three-toed Sloths (*Bradypus* and *Arctopithecus*) by having the intermaxillary bone moderately developed, forming the front edge to the jaw; whereas in the latter two genera it is rudimentary, free, and very commonly lost in preparing the specimen. But the development of the teeth, which I believe has not hitherto been observed, differs more. In *Choloepus* the front grinders in both jaws are much larger than the others, subtriangular, with bevelled edges, by their rubbing against each other, like the canines of pigs; they are developed at the same time as the other grinders, or, indeed, rather before; for they are of considerable size when the other grinders are small and rudimentary. The front ones of the upper jaw are separated from the others by a considerable space; and the lower one is considerably behind the produced front edge of the lower jaw, and separated from the other grinders by a moderate space. In the three-toed Sloths, on the contrary, the grinders are all regularly placed, the front lower one being transversely compressed and truncated. The front upper grinder is always smaller than the rest, cylindrical, and it is developed much later than the others. There is a specimen in the British Museum of a young skull of *Arctopithecus*, which has all the grinders in the upper and lower jaws well developed, but the upper front grinders are small, rudimentary, cylindrical, conical at the tip; and, on comparing other young skulls, it is evident that these teeth are gradually developed as the animal increases in age, and never attain the same size as the others.

*Note on Asaphus platycephalus.* By J. D. DANA.

The closing remark in my paper on page 368 will have to be cancelled if the species there referred to *Asaphus platycephalus* is identical with the *Asaphus platycephalus* (*A. (Isotelus) gigas*) of Trenton, the latter (as Mr. Billings writes the author) often occurring, in New York, rolled into a ball.—*Silliman's American Journal*, May 1871.